FIG. **7** illustrates one embodiment of the architecture of a system for providing the self-describing file **100** and the methods disclosed herein to one or more client devices, as described above. Content developed, interacted with or edited in association with the self-describing file **100** may be stored in different communication channels or other storage types. For example, various documents may be stored using a directory service **722**, a web portal **724**, a mailbox service **726**, an instant messaging store **728**, or a social networking site **730**. The self-describing file **100** may use any of these types of systems or the like for enabling data utilization, as described herein. A server **720** may provide the self-describing file **100** and/or methods for creating or modifying the self-describing file disclosed herein to clients. As one example, the server **720** may be a web server providing the self-describing file **100** and/or the methods for creating or modifying the self-describing file disclosed herein over the web. The server **720** may provide the self-describing file **100** and/or methods for creating or modifying the self-describing file disclosed herein over the web to clients through a network **715**. By way of example, the client computing device **718** may be implemented as the computing device **500** and embodied in a personal computer **718***a*, a tablet computing device **718***b* and/or a mobile computing device **718***c* (e.g., a smart phone). Any of these embodiments of the client computing device **718** may obtain content from the store **716**. In various embodiments, the types of networks used for communication between the computing devices that make up the present invention include, but are not limited to, an internet, an intranet, wide area networks (WAN), local area networks (LAN), and virtual private networks (VPN). In the present application, the networks include the enterprise network and the network through which the client computing device accesses the enterprise network (i.e., the client network). In one embodiment, the client network is part of the enterprise network. In another embodiment, the client network is a separate network accessing the enterprise network through externally available entry points, such as a gateway, a remote access protocol, or a public or private internet address.

Additionally, the logical operations may be implemented as algorithms in software, firmware, analog/digital circuitry, and/or any combination thereof, without deviating from the scope of the present disclosure. The software, firmware, or similar sequence of computer instructions may be encoded and stored upon a computer readable storage medium. The software, firmware, or similar sequence of computer instructions may also be encoded within a carrier-wave signal for transmission between computing devices.

This disclosure described some embodiments with reference to the accompanying drawings, in which only some of the possible embodiments were shown. Other aspects may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein. Rather, these embodiments were provided so that this disclosure was thorough and complete and fully conveyed the scope of the possible embodiments to those skilled in the art.

Although the embodiments have been described in language specific to structural features, methodological acts, and computer-readable media containing such acts, it is to be understood that the possible embodiments, as defined in the appended claims, are not necessarily limited to the specific structure, acts, or media described. One skilled in the art will recognize other embodiments or improvements that are within the scope and spirit of the present disclosure. Therefore, the specific structure, acts, or media are disclosed only as illustrative embodiments. The disclosure is defined by the appended claims.

What is claimed is:

1. A method for creating a self-describing file by a first application, the method comprising:

receiving, by a computing device, a command to create the self-describing file;

writing, by the computing device, a first portion of data to the self-describing file, wherein the first portion of data is natively supported by a second application;

writing, by the computing device, a second portion of data to the self-describing file, wherein the second portion of data is not natively supported by the second application;

providing, by the computing device, an extension element that includes information related to the second portion of data of the self-describing file, wherein the information is used by the second application to manipulate the second portion of data when the second application accesses the self-describing file; and

storing, by the computing device, the self-describing file, wherein the stored self-describing file comprises the extension element.

2. The method of claim **1**, wherein the first portion of data is at least one of an object, a property, a formula, a relationship, and a component.

3. The method of claim **2**, wherein the second portion of data is at least one of an object, a property, a formula, a relationship, and a component.

4. The method of claim **1**, wherein the information of the extension element defines a relationship between the first portion of data and the second portion of data.

5. The method of claim **4**, wherein defining the relationship between the first portion of data and the second portion of data comprises providing a formula to calculate the second portion of data based on the first portion of data.

6. The method of claim **1**, wherein providing the extension element comprises generating the extension element by the first application.

7. The method of claim **1**, wherein providing the extension element comprises receiving the extension element from a source other than the first application.

8. The method of claim **1**, wherein the information of the extension element defines the second portion of the data.

9. The method of claim **1**, further comprising:

writing a third portion of data to the self-describing file, wherein the third portion of data is not natively supported by the second application; and

providing a second extension element that includes information that defines a calculation used to derive a value for the third portion of data based upon the first portion of data.

10. A computer storage device encoding computer-executable instructions that, when executed by at least one processor, perform a method for creating a self-describing file, the method comprising:

receiving a command to create the self-describing file;

writing a first portion of data to the self-describing file, wherein the first portion of data is natively supported by a second application;

writing a second portion of data to the self-describing file, wherein the second portion of data is not natively supported by the second application;

providing an extension element that includes information related to the second portion of data of the self-describing file, wherein the information is used by the second application to manipulate the second portion of data when the second application accesses the self-describing file; and